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ABSTRACT

A method and apparatus for ensuring end-to-end QoS for user applications operating in multi-transport protocol environments while using PVC or SVC connection management procedures. A user application at a workstation having specific QoS requirements can selectively connect to one of a plurality of servers having varying QoS profiles, regardless of the transport protocols used in the underlying network. The user application initiates a session with a first QoS negotiator and a first QoS selector. The first QoS negotiator queries a second QoS negotiator for the QoS profile of a connected server. The second QoS negotiator, in conjunction with a second QoS selector, notifies the server of the address of the second QoS negotiator. The second QoS negotiator, in conjunction with the second QoS selector, sends a response to the first OoS negotiator and the first QoS selector indicating QoS profile and connection information of the server. The first QoS selector stores the received QoS profile and connection information in a database. The database is then queried by the user application to determine if a server having the desired QoS profile exists. If such a server does not exist, the QoS selection and negotation procedures are repeated and the database is updated. If a server having the desired QoS profile does exist, a PVC or SVC connection is established between the first and second QoS negotiators and QoS selectors, thereby ensuring end-to-end QoS for the user application and allowing the application to exchange data with the server using the PVC or SVC connection.

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